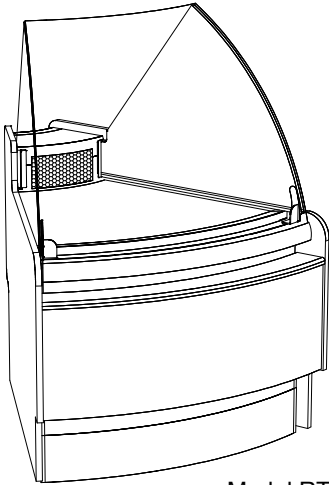


ENCORE[®] SERIES

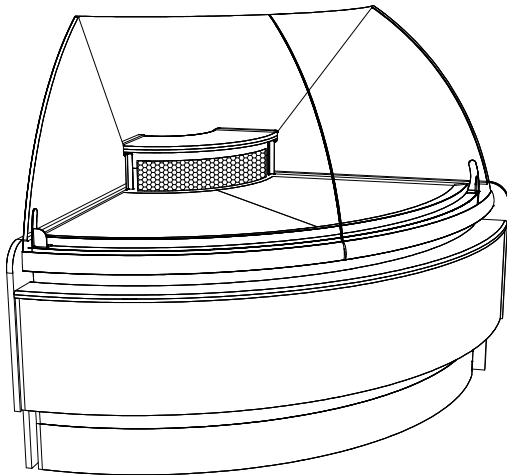
INSTALLATION AND OPERATING MANUAL

PN 54067

SERVICE-REFRIGERATED TABLE SPHERICAL
GLASS OUTSIDE WEDGE MERCHANDISERS

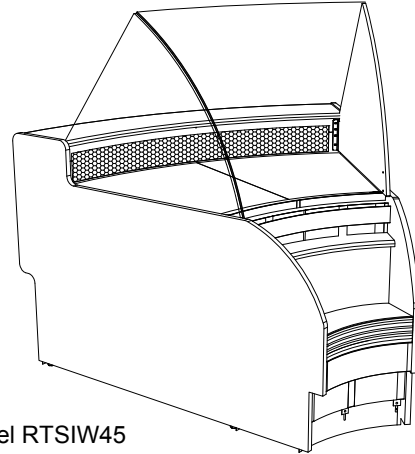


Model RTSOW45

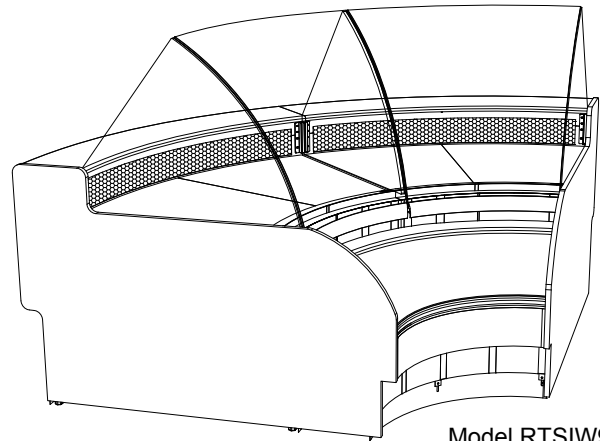


Model RTSOW90

SERVICE-REFRIGERATED TABLE SPHERICAL
GLASS INSIDE WEDGE MERCHANDISERS

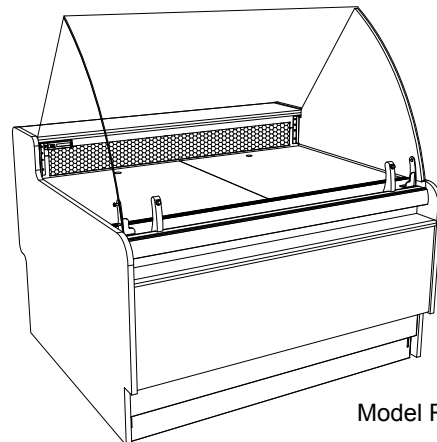


Model RTSIW45



Model RTSIW90

SERVICE-REFRIGERATED TABLE
SPHERICAL GLASS MERCHANDISERS



Model RTS60

Model RTS36	38 3/4"L* x 44 1/2"D x 54"H~
Model RTS48	50 3/4"L* x 44 1/2"D x 54"H~
Model RTS60	62 1/2"L* x 44 1/2"D x 54"H~
Model RTSOW45	41 1/4"L* x 45 3/8"D x 54"H~
Model RTSOW90	88 3/4"L* x 47 1/4"D x 54"H~
Model RTSIW45	14 1/2"L* x 54 1/2"D x 54 1/8"H~
Model RTSIW90	24 1/4"L* x 54 1/2"D x 54 1/8"H~

**Includes End Panels*

*~ With Adjustable Levelers Extended
1 1/2" Below Base Frame*



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OVERVIEW AND WARNINGS

OVERVIEW

- This Structural Concepts® Service Refrigerated case is designed to merchandise packaged / unpackaged bakery products at 5° Celsius / 41° Fahrenheit or less product temperatures.
- This case should be installed and operated according to this Installation-Operating Manual to insure proper performance.
- This unit is designed for the display of products in ambient store conditions where temperatures and humidity are maintained at a maximum of 75°F / 24°C and 55% relative humidity.

This merchandiser is designed for the display of non-hazardous, packaged / unpackaged bakery products (per NSF Std. 2 – 1999).



WARNING
Risk of Electric Shock.
Disconnect Power Before Servicing Unit



WARNING
Hazardous Moving Parts.
Do Not Operate unit with covers removed.
Fan blades may be exposed when deck panel is removed. Disconnect
power before removing deck panel.

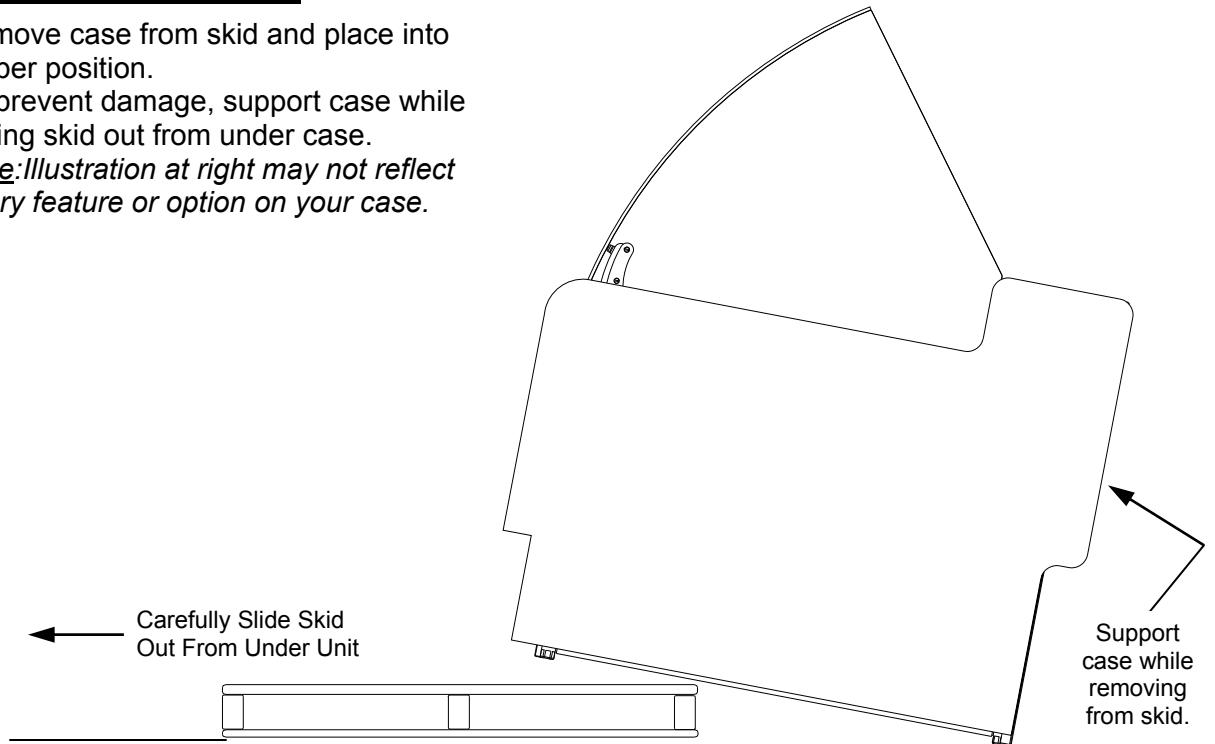


WARNING
Evaporator Tray is Hot

INSTALLATION

1. Remove Unit From Skid

- Remove case from skid and place into proper position.
- To prevent damage, support case while sliding skid out from under case.
- *Note: Illustration at right may not reflect every feature or option on your case.*

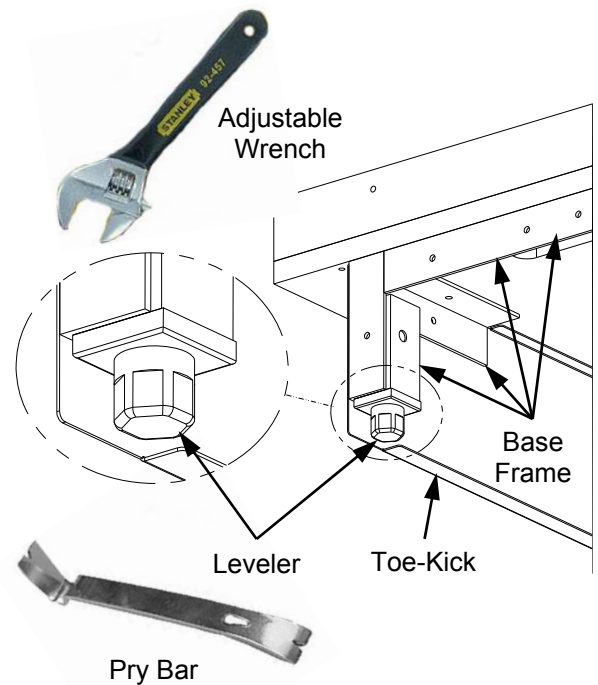


2. Position & Align Case Alongside Other Cases

- Before adjusting levelers, make certain that the case is in proper position and, if required, aligned with adjoining case(s).
- This may require the repositioning of the case you are installing or the already positioned case(s).

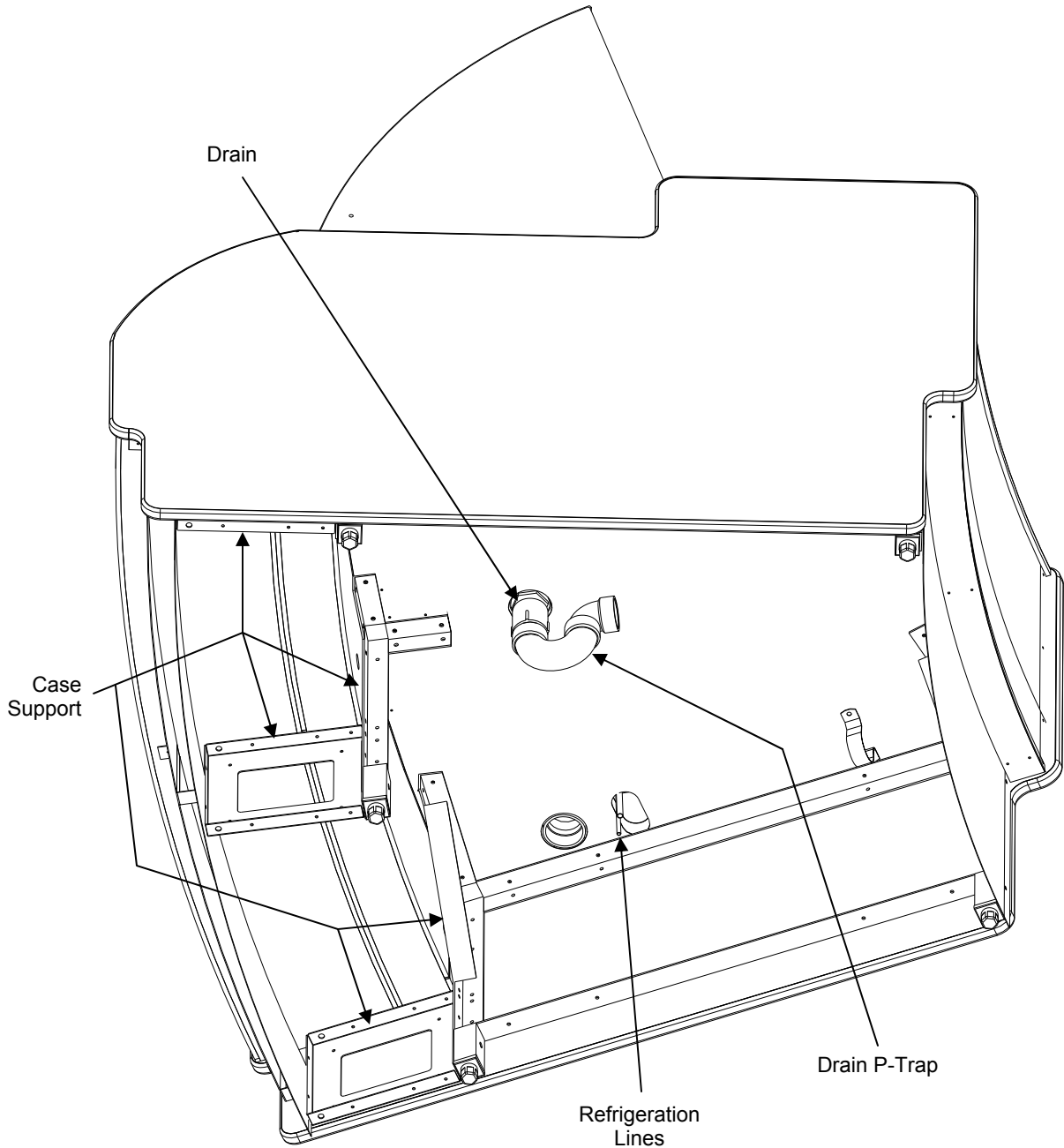
3. Adjust Levelers

- After case is in proper position, adjust case so it is level and plumb (see illustration at right).
- You may need to remove front and/or rear Toe-Kick to access levelers.
- Use adjustable wrench to adjust leveler.
- Depending upon case weight it may be necessary to use a Pry Bar to accomplish this task.
- Do not use Pry Bar on Toe-Kick as it may buckle.
- Do not use Pry Bar on End Panel as it may chip.
- Use Pry Bar **ONLY** on Base Frame to avoid damaging case.
- See illustration and photos at right.



Remote Only Units: Drain, P-Trap, Refrigeration Lines, Case Support locations

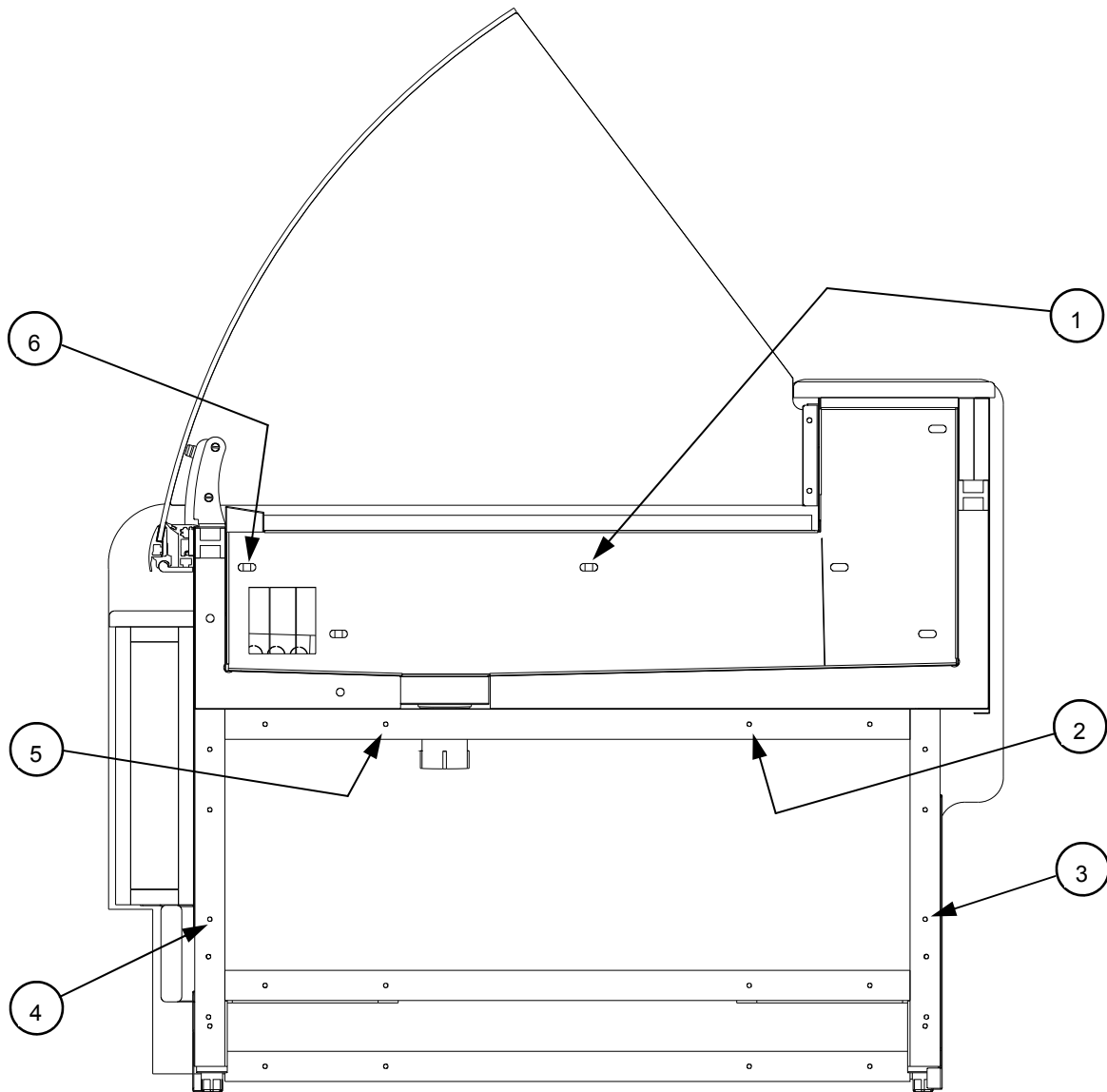
- See illustration below for location.
- Note: Illustration below t right may not reflect every feature or option on your case.



CASE ADJOINMENT

Case Adjoinment

- Case is shipped with end panel removed where it is to be adjoined.
- For proper case adjoinment, use the SCC®-provided 1/4-20 x 2 1/2" nuts, bolts and washers.
- Adjoinment is to be at locations ballooned below.
- SCC® Model DTS60 is shown below for illustrative purposes. Your model's appearance may slightly vary; however, general adjoinment locations are accurate.



CASE OPERATION

1. Evaporator Fan Discharge

When Case is energized, the Evaporator Fans should turn on.

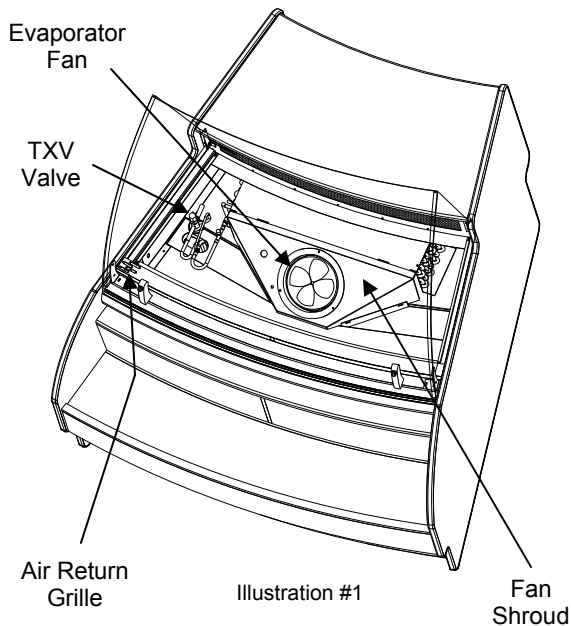
- Verify that Case Evaporator fans are operating BEFORE installing the decks (and sub-decks) into the case.
- When the case is in a start up mode or has been idle for a long period of time, the unit will require 75 minutes of run time to pull-down temperature.
- See below illustration.

2. TXV Valve

- TXV Valve is under TXV Valve Access Panel (at Customer Front-Left of Case).
- Decking must be removed for access.
- See illustration below-left for location.

3. Honeycomb Air Diffuser Removal

- Honeycomb is located in discharge air duct.
- Use a device of suitable strength such as a screwdriver or long-nose pliers.
- Wedge the instrument between the honeycomb and the honeycomb support plate.
- **Caution! Be careful not to scratch the case surfaces while using metal utensils.**
- Apply pressure to collapse the honeycomb and pry downward.



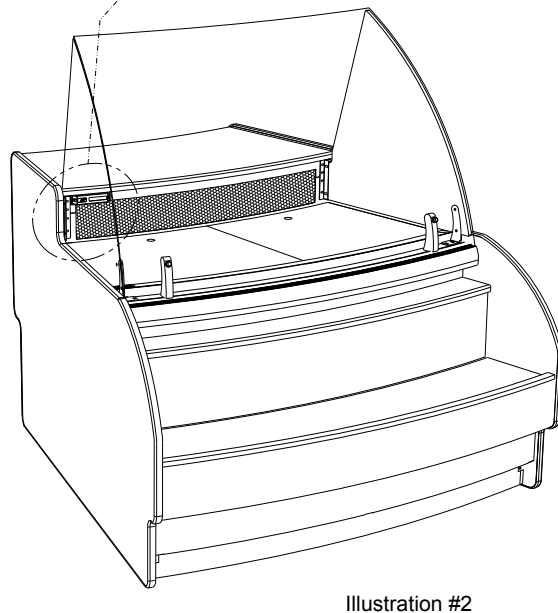
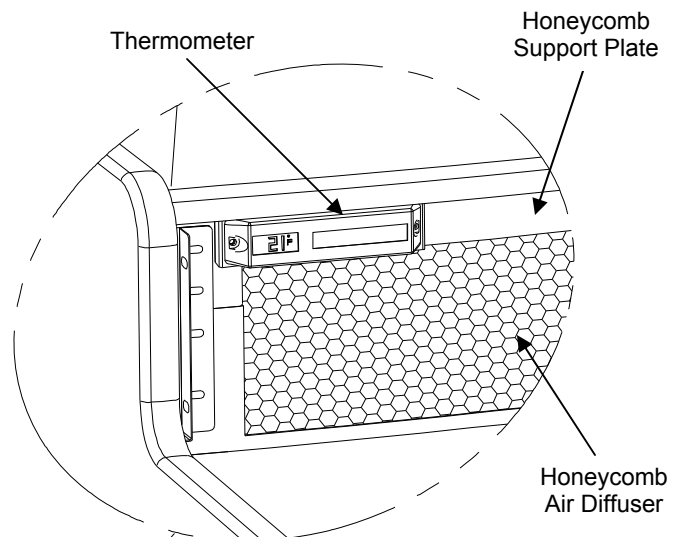
- Remove honeycomb by grasping with fingers of both hands and pulling outward.

4. Honeycomb Air Diffuser Installation

- Be certain to replace honeycomb in exact same position so as not to disrupt airflow.
- **Note:** Depending upon model and features, the illustration below may slightly differ from yours.

5. Thermometer

- Thermometer location is shown below.
- **Note:** Depending upon model, location may vary.



SHELF OPTION

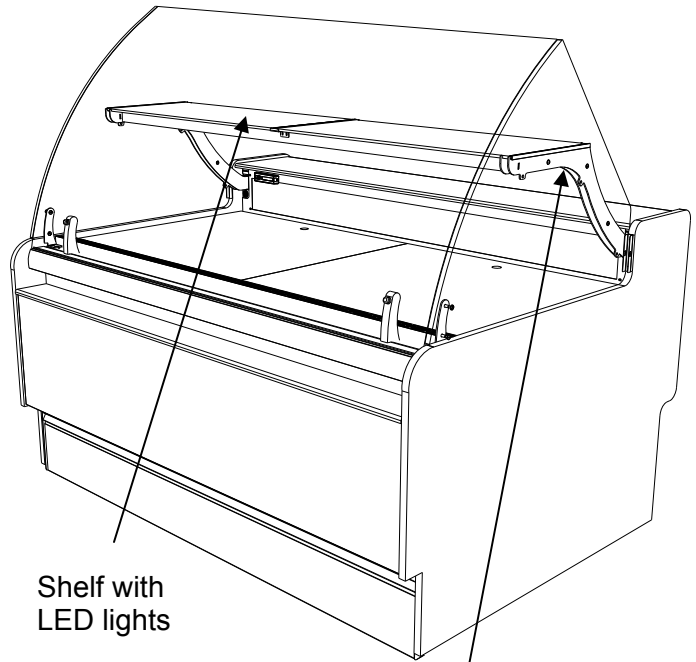
LED Style Light Fixtures

Removal of lamp:

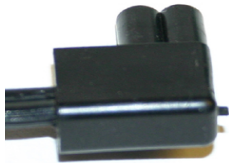
- If case is provided with LED lights, they will rarely require change-out.
- Contact Structural Concepts' Technical Service Department for replacement parts (see the Technical Service section of this operating manual).

Replacement of lamp:

- To replace LED Light Fixture, simply disconnect the existing LED light from its brackets and/or self-adhesive tape. Replace.
- **Note:** LED Light and Plug must be connected in a specific manner or they will not work.
- Make certain flat edge of plug connects to flat edge of LED light.
- See illustrations below.

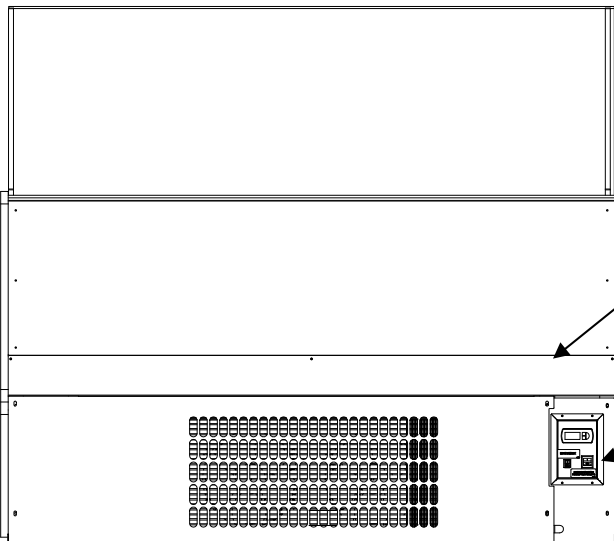
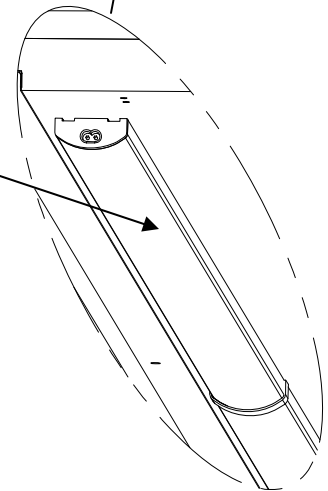


LED's Oval Form



Plug's Oval Form

LED Lights



Light Switch Location for Remote units will be on bottom side of wire way.

Light Switch Location for Self Contained units.

For illustration purposes a self contained unit is shown.

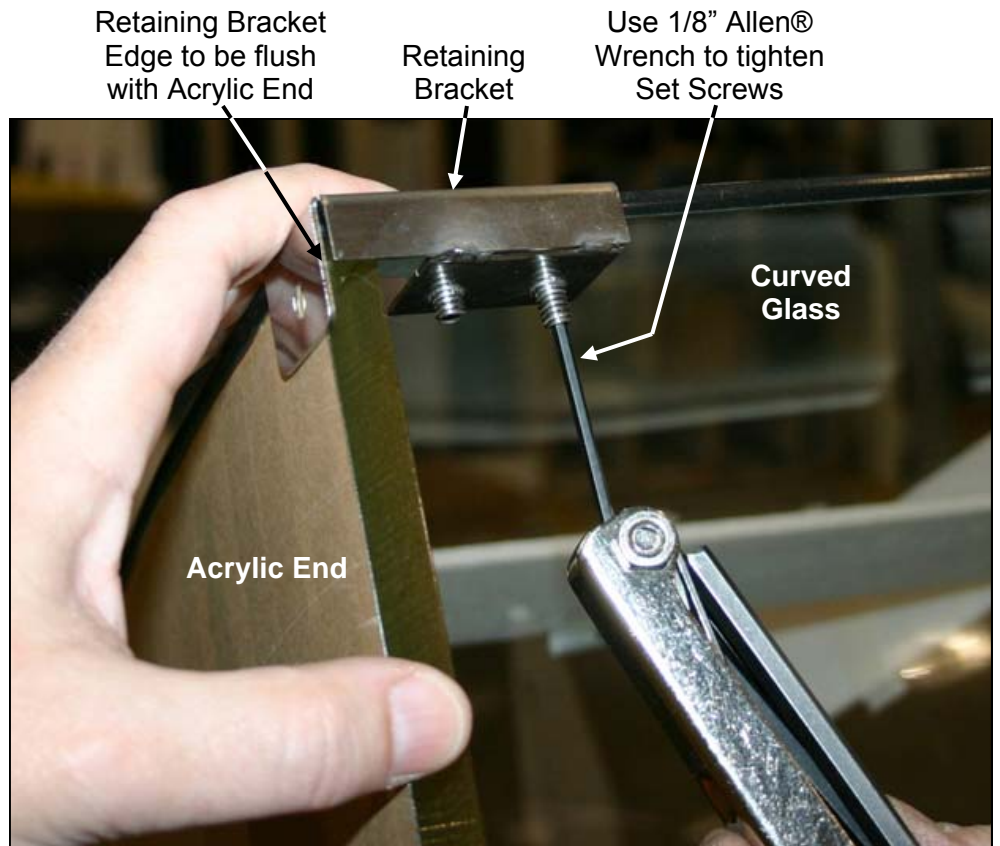
1. Curved Glass Retaining Bracket

- The Retaining Bracket must remain parallel to curved glass (not angled).
- Screws are to be on employee side. Customers are NOT to see screws.
- Caution! Do not over-tighten!




2. Acrylic Ends Retaining Bracket

- View at right is for the Customer RH side of case.
- Customer LH side of case will have mirrored piece.
- Retaining Bracket is to be Screwed Securely Into Place.
- Caution! Do not over-tighten!



Serial Label Location & Information Listed / Technical Information & Service


- Serial labels are located near the electrical access on your case.
- Serial labels contain electrical, temperature & refrigeration information, as well as regulatory standards to which the case conforms.
- For additional technical information and service, see the *TECHNICAL SERVICE* page in this manual for instructions on contacting Structural Concepts' Technical Service Department.
- See images below for samples of both refrigerated and non-refrigerated serial labels.



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ENCORE[®] MODEL HV74RSS SCROLL
SERIES SERIAL NO.

FOR PARTS AND SERVICE
CALL 1-800-433-9489



3048256
CONFORMS TO UL STD 471
CONFORMS TO NSF STD 7
CERTIFIED TO CAN/CSA
STD C22.2 NO 120


ELECTRICAL RATING 120/1/60 24A
REFRIGERANT R404A AMOUNT ?? OZ
DESIGN PRESSURE HIGH 450 LOW 200
MINIMUM CIRCUIT 30A
MAXIMUM OVERCURRENT 30A

SAMPLE ONLY

Super Heat Temp	8-10°F
BTUH Requirements	9,738 BTUH @ 20° F SST
Defrost	6 defrosts per day, 45° F termination, 45 min. failsafe

SAMPLE ONLY

----- Sample Serial Label For Refrigerated Case -----




888 E. Porter Rd · Muskegon, MI 49441

Addenda[®] PC5682 txtRemote
txtSerialNumber

120 VOLTS 60 HZ SINGLE PHASE 1.84AMP

FOR PARTS OR SERVICE CALL
STRUCTURAL CONCEPTS
AT
1-800-433-9489



3048256
CONFORMS TO UL STD 65
CERTIFIED TO CAN/CSA
STD C22.2 NO 120

SAMPLE ONLY

N/A

----- Sample Serial Label For Non-Refrigerated Case -----

TROUBLESHOOTING - GENERAL ISSUES

CONDITION	TROUBLESHOOTING
Case Not Lining Up	See Installation Section for instructions on properly aligning case (alongside other cases) and adjusting levelers.
Water Is On The Floor	Check that the drain trap is free of debris.
	Check that the drain hose is correctly positioned over evaporator pan (or floor drain, for remote units).
	Check store conditions. Conditions should be 55% humidity / 75° Fahrenheit to prevent condensation.
	Check that the evaporator condensate pan is plugged in.
	Check evaporator pan float for proper operation.
	Check evaporator pan is heating properly.
Fan Emits Excessive Noise	Check that the case is aligned, level and plumb.
	Check evaporator fan for cleanliness.
	Unplug/power off fan motors. Check motor shaft for excessive bearing wear.
	Check that fan motors are securely mounted in brackets.
	Verify that fan blades are securely mounted to fan motor.
	Check that nothing is preventing blade rotation.
	Check that the fan shroud is properly secured.
Fans Are Not Working	Check that the MAIN power switch is on.
	Check that fans are plugged in at the fan shroud.
	Check for foreign material obstructing fan performance.
	Check that fan blades freely rotate within fan shrouds
	Check that power is going to fans
	Check that fan wiring is connected on terminal blocks.
Digital Control Display Is Blank	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
System Is Not Operating	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.

TROUBLESHOOTING - GENERAL ISSUES, CONTINUED

CONDITION	TROUBLESHOOTING
Control Display Is Flashing	<i>See “Condensing Unit Is Not Operating” in the Condition column below, and its Troubleshooting solution.</i>
Case Is Not Holding Temperature.	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Unit needs product to be pre-chilled.
	Temperature changes during defrost mode but will return to normal. Fourth LED will indicate defrost cycle in progress.
	Check that the case is not in the sun or near a heat or air-conditioning vent.
	If case is located near front doors, temperature fluctuation can hinder unit’s ability to maintain temperature.
	Check that condenser coil has been cleaned.
	Check air grilles for obstructions.
	Check sight glass for flashing and/or low charge.
	Check Set Point Temp.; it may be adjusted too high.
Condensing Unit Is Not Operating.	If the LED is flashing <i>dEF</i> , the Controller is in defrost mode (not an alarm). Compressor is running in a normal condition.
	Check that the power is turned on.
	Carefully review Controller’s Settings for accuracy. See <i>Temperature CONTROLLER Section for Thermostat Controller Operation’s Settings</i>

TROUBLESHOOTING - CONDENSING SYSTEM

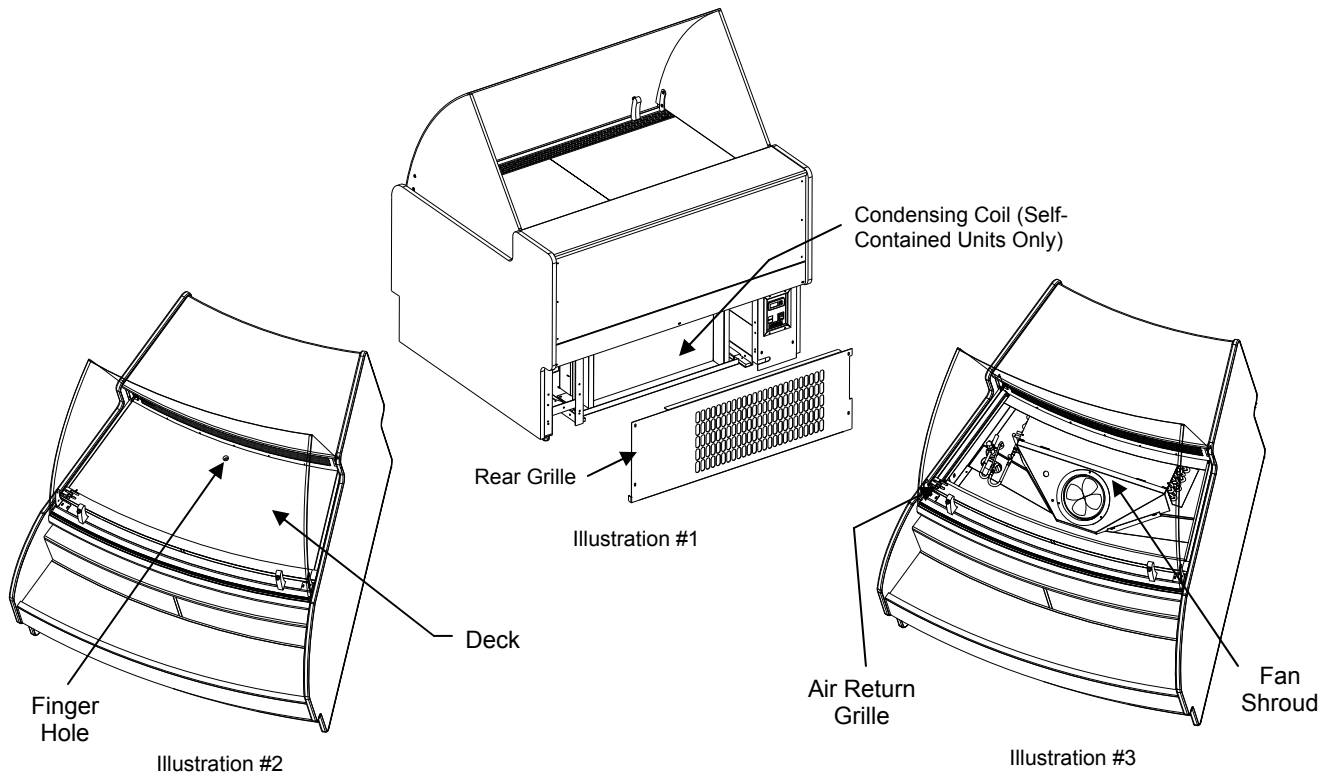
CONDITION	TROUBLESHOOTING
Head Pressure Too High	Check that the Condensing Coil is not dirty or covered.
	Check that Condensing Fans are working.
	Check that refrigerant is not overcharged.
	Check to verify that a non-condensable is not in the system.
	Check that Liquid Line Drier is not plugged.
	Check that there are no close-offs around Condensing Coil.
	Check Set Point Temp.; it may be adjusted too high.
	Check System Operating Temperatures.
	Check that Store Ambient Temperature isn't above maximum allowed. See <i>Overview and Warnings</i> Section.
Head Pressure Too Low	Check that Refrigerant Charge isn't too low.
	Check that Suction Pressure isn't too low.
	Check to verify that Compressor Valves aren't bad.

TROUBLESHOOTING - EVAPORATOR SYSTEM

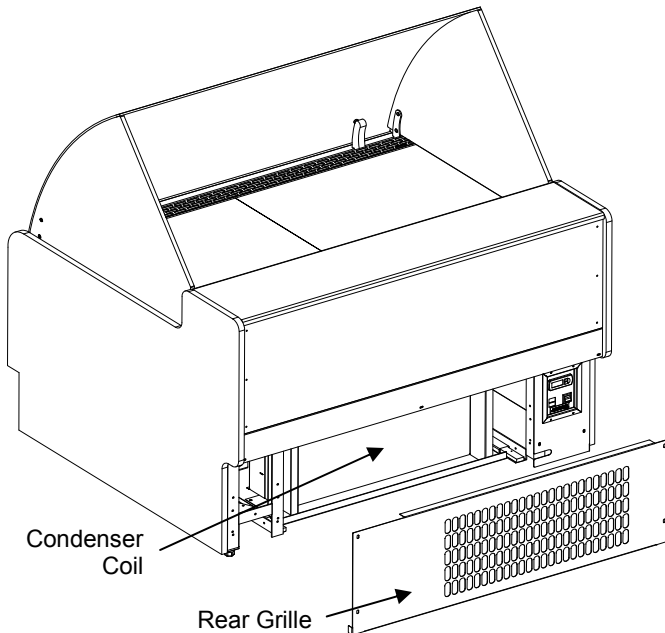
CONDITION	TROUBLESHOOTING
Low Suction Pressure	Check that the Refrigerant doesn't have a low charge.
	Check that Expansion Valve isn't restricted.
	Check that Liquid Line or Filter isn't restricted.
	Check that Evaporator Motors are working.
	Check that High Superheat doesn't need adjusting.
	Check that the Thermostatic Element charge isn't depleted.
	Check that there is air no seepage of air around Condensing Coil.
	Check that the Coil is not iced up.
High Suction Pressure	Check that Refrigerant Charge isn't too high.
	Check that Compressor Valves aren't bad.
	Check that the Cooling Load isn't high.
	Check that Superheat Adjustment isn't low.
	Check TXV Bulb Installation <ul style="list-style-type: none"> a. Poor thermal contact. b. Warm location.
	Check Compressor: Low capacity means it is undersized for its application.

CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL

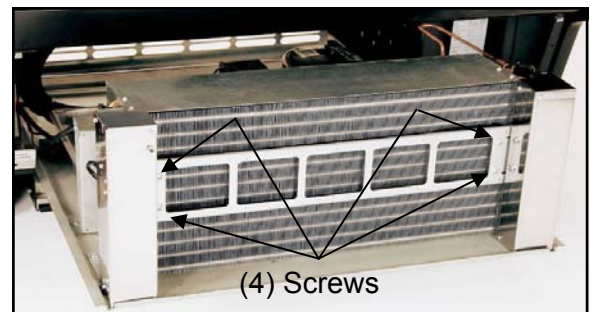
AREA TO BE CLEANED	FREQUENCY	INSTRUCTIONS
Case Exterior	Daily	Condensing Coil (Self-Contained Units Only): See Illustration #1 below. Remove Rear Grille (4 screws). Vacuum or brush Condenser Coil.
	Daily	Glass: Clean front and side glass with a household or commercial glass cleaner and a soft cloth or paper towel.
	Daily	End Panels, Front Panel, Toe-Kick, etc.: Wipe off all surfaces with warm water and mild soap solution and non-abrasive cloth.
Case Interior	Daily	Decks: Wipe off decks with moist cloth.
	Monthly	Air Return Grille and Fan Shroud Area: See illustrations #2 & 3 below. <i>Note: Illustrations may slightly differ from your model.</i> 1) Turn off power. 2) Use finger hole to carefully lift and remove decks and sub-decks from case. Caution! Decks are heavy! Two people may be required to remove decks. 3) Clean with moist cloth and mild soap solution. 4) Return to case in same manner removed.



PREVENTIVE MAINTENANCE	FREQUENCY	INSTRUCTIONS
Case Exterior	Quarterly	<p>Condensing Coil: <i>Disconnect power from case before cleaning Condenser Coil!</i></p> <ul style="list-style-type: none"> • Remove Rear Grille (by removing 4 screws). • Slide/Roll out condensing unit assembly. • Use air pressure or industrial strength vacuum; clean dust and dirt that may collect on the Condenser Coil. See illustration below. • Caution! Coil fins are sharp. Handle with care! • Slide/Roll Condensing Unit Assembly back under case. • Replace Rear Grille to case (4 screws). • See illustration below.
	Quarterly	<p>Clean Sweep™ Condensing Coil: <i>Disconnect power from case before cleaning Clean Sweep™ Condenser Coil!</i></p> <ul style="list-style-type: none"> • Remove Rear Grille (by removing 4 screws). • Slide/Roll out condensing unit assembly. • Remove the four (4) screws holding the Clean Sweep™ rails intact. • Remove the Clean Sweep™ rail. • Wash rails' brushes in hot water and mild soap solution. • If brushes are worn, they must be replaced. Call Technical Service Department to replace. Toll-Free number is listed at end of manual. • Clean Condensing Coil: Use air pressure or industrial strength vacuum; clean the dust and dirt that may collect on the Condenser Coil. • Caution! Coil fins are sharp. Handle with care! • Reattach Clean Sweep rail to condensing unit (4 screws). • Slide/Roll Condensing Unit Assembly back under case. • Replace Rear Grille to case (4 screws). • See photos below.



--- Above illustration may not exactly reflect your particular model ---



WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

PREVENTIVE MAINTENANCE	FREQUENCY	INSTRUCTIONS
Case Exterior	Quarterly	<p>Compressor Area: <i>Disconnect power from case before cleaning Condenser Coil!</i></p> <ul style="list-style-type: none"> Slide/Roll out from under case. Use moist cloth to wipe off dust & debris that collects on various parts.
	Quarterly	<p>Evaporator Pan: Disconnect from receptical box. Remove mounting screw(s) from base. Use a de-scaling solution (such as CLR® that will prevent corrosion, lime and rust) to clean pan. Rinse thoroughly; do not submerge in water.</p>
	Quarterly	<p>Under Case Cleaning: Once refrigeration package is clear of unit, vacuum under case to remove all dust and dirt that may collect.</p>
Case Interior	Quarterly	<p>Tub, Coil and Drain: Remove Evaporator Fan Panel and clean Tub, Coil and Drain with warm water and mild soap solution. Remove any debris that may clog drain.</p>
	Quarterly	<p>Fan Blades, Motor, and Bracket: Wipe down each blade, motor and bracket with moist cloth.</p>
	Quarterly	<p>Honeycomb: Remove the honeycomb. Vacuum, then clean with warm water and soap. See instructions below.</p>

Honeycomb Air Diffuser Removal

- Honeycomb is located in the discharge air duct.
- From inside the units lower refrigerated area, locate the two most forward screws which secure the lower light & discharge panel.
- Remove the two most forward screws and allow the panel to hang down supported by the rear screws. **Do not force panel lower.**
- Obtain a non-metallic device of suitable strength such as a ballpoint pen.
- Wedge the instrument between the honeycomb and the end panel.
- Apply pressure to collapse the honeycomb and pry downward and away from the lower light & discharge panel.
- Pull honeycomb out fully buy grasping with fingers and pulling downward.
- Be certain to replace Honeycomb in exact same position so as not to disrupt airflow.

Honeycomb Air Diffuser Installation

- Insert honeycomb up into honeycomb retainer first.
- Replace the two screws that secure the leading edge of lower light & discharge panel.

CAREL

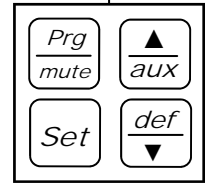
ir33 platform
 Integrated Electronic
 Microprocessor Controller



Programming The Instrument

How To Modify The Setpoint

Set Press and hold the "SET" key for at least 1 second.



How To Modify The Defrost, Differential Or Other Parameters

Prg/mute **Set** 1. Press & hold "Prg" and "SET" keys together for at least 5 seconds; the display will show the number "0", representing the password prompt.

Set 2. Confirm by pressing "SET" key.

▲/aux **def** 3. Press ▲ or ▼ to reach the category to be modified.

Set 4. Press "SET" to modify this selected parameter.

▲/aux **def** 5. Increase or decrease the value using the ▲ or ▼ button respectively.

Set 6. Press the "SET" key to temporarily save the new value and return to the display of the parameter.

Prg/mute 7. Press & hold the "Prg" key for at least 5 seconds to save changes. This action will also mute the audible alarm (buzzer) & deactivate the alarm relay.

How To Change Reading From Fahrenheit (°F) To Celsius (°C)

Prg/mute **Set** 1. Press and hold "Prg" and "SET" keys together for at least 5 seconds; display will show "0", representing password prompt.

Set 2. Confirm by pressing "SET" key.

▲/aux **def** 3. Press ▲ or ▼ until reaching the parameter "/ 5".

Set 4. Press "SET" to modify this selected parameter.

▲/aux **def** 5. Press ▲ or ▼ to change value to desired setting: "0" for Celsius (°C) or "1" for Fahrenheit (°F).

Set 6. Press "SET" key to temporarily save the new value and return to the display of the parameter.

Prg/mute 7. Press & hold "Prg" key for at least 5 seconds to save changes. **Note! All values will automatically convert to new scale. No conversion is required.**

Warning! Save Your Parameter Settings!

1. To store the new parameter values, PRESS and HOLD the "Prg" key for at least 5 seconds.
2. All modifications made to parameters will be lost if you do NOT press a button within 60 seconds. Should this "timeout" occur, normal operational settings (prior to modifications being made) will resume.
3. If the instrument is switched off before pressing the "Prg" key, all modifications to parameters will be lost.

How To Activate Manual Defrost

def Press and hold the "def" key for at least 5 seconds.

How To Activate / Deactivate Auxiliary Output

▲/aux Press and hold the "aux" key for at least 1 second.

How To Reset Any Alarms With Manual Reset

Prg/mute **▲/aux** Press and hold the "Prg" and "aux" key for at least 1 second.

CAREL

ir33 platform
**Integrated Electronic
 Microprocessor Controller**



User Interface - Display

ICON	FUNCTION	DESCRIPTION	ON	Normal operation OFF	BLINK	Start up
	COMPRESSOR	ON when the compressor starts. Flashes when the activation of the compressor is delayed by safety times.	Compressor on	Compressor off	awaiting activation	
	FAN	ON when the fan starts. Flashes when the activation of the fan is prevented due to external disabling or procedures in progress.	Fan on	Fan off	awaiting activation	
	DEFROST	ON when the defrost is activated. Flashes when the activation of the defrost is prevented due to external disabling or procedures in progress.	Defrost in progress	Defrost not in progress	awaiting activation	
	AUX	Flashes if the anti-sweat heater function is active, ON when the auxiliary output (1 and/or 2) selected as AUX (or LIGHT in firmware version 3.6) is activated.	AUX auxiliary output active (version 3.6 light auxiliary output active)	AUX auxiliary output not active	Anti-sweat heater function active	
	ALARM	ON following pre-activation of the delayed external digital input alarm. Flashes in the event of alarms during normal operation (e.g. high/low temperature) or in the event of alarms from an immediate or delayed external digital input.	Delayed external alarm (before the time 'A7' elapses)	No alarm present	Alarms in norm. operation (e.g. High/low temperature) or immediate or delayed alarm from external digital input	
	CLOCK	ON if at least one timed defrost has been set. At start-up, comes ON for a few seconds to indicate that the Real Time Clock is fitted.	If at least 1 timed defrost event has been set	No timed defrost event set	Alarm clock	ON if real-time clock present
	LIGHT	Flashes if the anti-sweat heater function is active, ON when the auxiliary output (1 and/or 2) selected as LIGHT is activated (in firmware version 3.6 it does not flash in anti-sweat heater mode and comes on when the dead band output is active).	Light auxiliary output on (version 3.6 dead band auxiliary output active)	Light auxiliary output off	Anti-sweat heater function active (version 3.6 does not flash in anti-sweat heater mode)	
	SERVICE	Flashes in the event of malfunctions, for example E2PROM errors or probe faults.		No malfunction	Malfunction (e.g. E2PROM error or probe fault). Contact service	
	CONTINUOUS CYCLE	ON when the CONTINUOUS CYCLE function is activated. Flashes if the activation of the function is prevented due to external disabling or procedures in progress (E.g.: minimum compressor OFF time).	CONTINUOUS CYCLE operation activated	CONTINUOUS CYCLE function not activated	CONTINUOUS CYCLE operation requested	

Summary Table of Alarm and Signals: Display, Buzzer and Relay

Code	Icon on the display	Alarm relay	Buzzer	Reset	Description
rE	flashing	on	on	automatic	virtual control probe fault
E0	flashing	off	off	automatic	room probe S1 fault
E1	flashing	off	off	automatic	defrost probe S2 fault
E2	flashing	off	off	automatic	probe S3 fault
E3	flashing	off	off	automatic	probe S4 fault
E4	flashing	off	off	automatic	probe S5 fault
'	No	off	off	automatic	probe not enabled
LO	flashing	on	on	automatic	low temperature alarm
HI	flashing	on	on	automatic	high temperature alarm
AFr	flashing	on	on	manual	antifreeze alarm
IA	flashing	on	on	automatic	immediate alarm from external contact
dA	flashing	on	on	automatic	delayed alarm from external contact
dEF	on	off	off	automatic	defrost running
Ed1	No	off	off	automatic/manual	defrost on evaporator 1 ended by timeout
Ed2	No	off	off	automatic/manual	defrost on evaporator 2 ended by timeout
Pd	flashing	on	on	automatic/manual	maximum pump down time alarm
LP	flashing	on	on	automatic/manual	low pressure alarm
AtS	flashing	on	on	automatic/manual	autostart in pump down
cht	No	off	off	automatic/manual	high condenser temperature pre-alarm
CHT	flashing	on	on	manual	high condenser temperature alarm
dor	flashing	on	on	automatic	door open too long alarm
EE	flashing	off	off	automatic	E2prom error, unit parameters
EF	flashing	off	off	automatic	E2prom error, operating parameters
ccb	Signal				start continuous cycle request
ccE	Signal				end continuous cycle request
dFb	Signal				start defrost call
dFE	Signal				end defrost call
On	Signal				switch ON
off	Signal				switch OFF
rES	Signal				reset alarms w/manual reset / reset HACCP alarms / reset temp. monitoring

CAREL

ir33 platform
 Integrated Electronic
 Microprocessor Controller



Summary Table of Operating Parameters

CODE	PARAMETER	UOM*	TYPE	MINIMUM	MAXIMUM	DEFAULT
/5	Select Celsius (°C) or Fahrenheit (°F)	flag	C	0	1	For Case Specific Defaults See Serial Label Located Near Electrical Access On Your Case. For Additional Technical Information Call Structural Concepts Technical Service Dept. at 1(800) 433.9489
/c1	Calibration of probe 1	°C/°F	C	-20	20	
/c2	Calibration of probe 2	°C/°F	C	-20	20	
St	Temperature set point	°C/°F	F	r2	r1	
rd	Control delta	°C/°F	F	20	0.1	
dl	Interval between defrosts	hours	F	0	250	
dt1	End defrost temperature, evaporator	°C/°F	F	-50	200	
dP1	Maximum defrost duration, evaporator	min	F	1	250	
d6	Display on hold during defrost	-	C	0	2	
dd	Dripping time after defrost	min	F	0	15	
d/1	Display of defrost probe 1	°C/°F	F	-	-	

* Unit Of Measure

STRUCTURAL CONCEPTS CORPORATION TECHNICAL SERVICE
PHONE NUMBER: 1.800.433.9489 or For Your Master Service Agent See
WWW.STRUCTURALCONCEPTS.COM/Contact/Master_Service_Agents.asp

WARRANTY INFORMATION

(Note: Standard Limited Warranty can be found at www.Structuralconcepts.com)

All sales by Structural Concepts Corporation (SCC) are subject to the following limited warranty. "Goods" refers to the product or products being sold by SCC.

Warranty Scope: Warranty is for equipment sold to establishments in the United States, Canada, Mexico and Puerto Rico.

Warranty; Remedies; Limitations. SCC warrants that if any Goods are found by an authorized representative of SCC not to be of good material or workmanship within one year of the date of shipments SCC will, at its option after inspection by an authorized representative, replace any defective Good or pay the reasonable cost of replacement for any such defective Goods, provided that written notice of the defect is given to SCC within 30 days of the appearance of such defect. If notice is not given within such period, any claim for breach of warranty shall be conclusively deemed to have been waived and SCC shall not be liable under this warranty. If SCC is unable to repair or replace the defective Goods, SCC shall issue a credit to the Purchaser for all or part of the purchase price, as SCC shall determine. The replacement or payment in the manner described above shall be the sole and exclusive remedy of Purchaser for a breach of this warranty. If any Goods are defective or fail to conform to this warranty, SCC will furnish instructions for their disposition. No Goods shall be returned to SCC without its prior consent.

SCC's liability for any defect in the Goods shall not exceed the purchase price of the Goods. SCC SHALL HAVE NO LIABILITY TO PURCHASE FOR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, LOST PROFITS, OR OTHER ECONOMIC INJURY DUE TO ANY DEFECT IN THE GOODS OR ANY BREACH OF SCC. SCC SHALL NOT BE LIABLE TO THE PURCHASER IN TORT FOR ANY NEGLIGENT DESIGN OR MANUFACTURE OF THE GOODS, OR FOR THE OMISSION OF ANY WARNING THEREFROM.

SCC shall have no obligation or liability under this warranty for claims arising from any other party's (including Purchaser's) negligence or misuse of the Goods or environmental conditions. This warranty does not apply to any claim or damage arising for or cause by improper storage, handling, installation, maintenance, or from fire, flood, accidents, structural defects, building settlement or movement, acts of God, or other causes beyond SCC's control.

Except as expressly stated herein, SCC makes no warranty, express, implied, statutory or otherwise as to any parts or goods not manufactured by SCC. SCC shall warrant such parts or Goods only (I) against such defects, (II) for such periods of time, and (III) with such remedies, as are expressly warranted by the manufacturer of such parts of Goods. Notwithstanding the foregoing, any warranty with respect to such parts of Goods and any remedies available as a result of a breach thereof shall be subject to all of the procedures, limitations, and exclusions set forth herein.

THE WARRANTIES HEREIN ARE IN LIEU OF ALL WARRANTIES, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE. IN PARTICULAR, SCC MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No representative, agent or dealer of SCC has authority to modify, expand, or extend this Warranty, to waive any of the limitations or exclusions, or to make any different or additional warranties with respect to Goods.

Period of Limitations. No claim, suit or other proceeding may be brought by Purchaser for any breach of the foregoing warranty or this Agreement by SCC or in any way arising out of this Agreement or relating to the Goods after one year from the date of the breach. In the interpretation of this limitation on action for a breach by SCC, it is expressly agreed that there are no warranties of future performance of the goods that would extend that period of limitation herein contained for bringing an action.

Indemnifications. Purchaser agrees to indemnify, hold harmless, and defend SCC if so requested, from any and all liabilities, as defined herein, suffered, or incurred by SCC as a result of, or in connection with, any act, omission, or use of the Goods by Purchaser, its employees or customers, or any breach of this Agreement by Purchaser. Liabilities shall include all costs, claims, damages, judgments, and expenses (including reasonable attorney fees and costs).

Remedies of SCC. SCC's rights and remedies shall be cumulative and may be exercised from time to time. In a proceeding or action relating to the breach of this Agreement by Purchaser, Purchaser shall reimburse SCC for reasonable costs and attorney's fees incurred by SCC. No waiver by SCC of any breach of Purchaser shall be effective unless in writing nor operate as a waiver of any other breach of the same term thereafter. SCC shall not lose any right because it has not exercised it in the past.

Applicable Law. This Agreement is made in Michigan and shall be governed by and interpreted according to Michigan law. Any lawsuit arising out of this Agreement or the Goods may be handled by a federal or state court whose district includes Muskegon County, Michigan, and Purchaser consents that such court shall have personal jurisdiction over Purchaser.

Miscellaneous. If any provision of this Agreement is found to be invalid or unenforceable under any law, the provision shall be ineffective to that extent and for the duration of the illegality, but the remaining provisions shall be unaffected. Purchaser shall not assign any of its rights nor delegate any of its obligations under this Agreement without prior written of SCC. This Agreement shall be binding upon and inure to the benefit of SCC and Purchaser and each of their legal representatives, successors and assigns.

SCC warrants its products to be free of defects in materials and workmanship under normal use and service for a period of one (1) year from the date of delivery.

This warranty is extended only to the original purchaser for use of the Goods. It does not cover normal wear parts such as plastic tongs, tong holders, tong cables, bag holders, or acrylic dividers.

General Conditions. All service labor and/or parts charges are subject to approval by SCC. Contact the Customer Service Department in writing or call 231-798-8888.

All claims must contain the following information: (1) model & serial code number of equipment; (2) the date and place of installation; (3) the name and address of the agency which performed the installation; (4) the date of the equipment failure; and (5) a complete description of the equipment failure and all circumstances relating to that failure.

Once the claim has been determined to be a true warranty claim by SCC's Customer Service Department, the following procedure will be taken: (1) replacement parts will be sent at no charge from SCC on a freight prepaid basis; (2) reimbursement for service labor will be paid if the following conditions have been met— (a) prior approval of service agency was awarded from the Customer Service Department; and (b) an itemized statement of all labor charges incurred is received by the Customer Service Department. The cost of the service labor reimbursement will be based on straight time rates and reasonable time for the repair of the defect.

If problems occur with any compressor, notify SCC's Customer Service Department immediately. Any attempt to repair or alter the unit without prior consent from the Customer Service Department will render any warranty claim null and void. This warranty and protection plan does not apply to any condensing unit or any part thereof which has been subject to accident, negligence, misuse, or abuse, or which has not been operated in accordance with the manufacturer's recommendations or if the serial number of the unit has been altered, defaced, or removed.

Limit of Liability. The limit of liability of SCC toward the exchange cost of the original condensing unit, F.O.B. SCC, Norton Shores, MI, of each motor-compressor assembly replaced during the warranty shall not exceed manufacturer's current established wholesaler's exchange price and in no case shall the labor of removing or replacing the motor-compressor or parts thereof be the responsibility of SCC.